DERWENT-

1997-352093

ACC-NO:

DERWENT-

200519

WEEK:

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TITLE:

Flexible <u>cellulose</u> fibres production with reduction of e.g. orientation - involves passing wet fibre through bath containing <u>water and water</u>-miscible

alkanol, di:ol and/or tri:ol and washing bath containing one of these

INVENTOR: FINK, H; FRIGGE, K; REMDE, H; WALENTA, E; WEIGEL, P

PATENT-ASSIGNEE: FRAUNHOFER GES FOERDERUNG ANGEWANDTEN[FRAU], FRAUNHOFER

GES FOERDERUNG ANGEWANDTEN EV[FRAU]

PRIORITY-DATA: 1996DE-1000572 (January 9, 1996)

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
1	DE 19600572 B4	March 10, 2005	N/A	000	D01F 002/02
•	DE 19600572 A1	July 10, 1997	N/A	005	D01F 002/02
	WO 9725462 A1	July 17, 1997	G	019	D01F 002/00
	EP 876522 A1	November 11, 1998	G	000	D01F 002/00
	US 6103162 A	August 15, 2000	N/A	000	D01D 010/06
	EP 876522 B 1	March 21, 2001	G	000	D01F 002/00
	DE 59606647 G	April 26, 2001	N/A	000	D01F 002/00

DESIGNATED-

RU US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE

STATES: DE GB AT BE DE GB

CITED-DOCUMENTS: 2.Jnl.Ref; DE 4420304; WO 9214871

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DE 19600572B4	N/A	1996DE-1000572	January 9, 1996
DE 19600572A1	N/A	1996DE-1000572	January 9, 1996
WO 9725462A1	N/A	1996WO-DE02190	November 13, 1996
EP 876522A1	N/A	1996EP-0945731	November 13, 1996
EP 876522A1	N/A	1996WO-DE02190	November 13, 1996
EP 876522A1	Based on	WO 9725462	N/A
US 6103162A	N/A	1996WO-DE02190	November 13, 1996
US 6103162A	N/A	1998US-0091679	December 14, 1998
US 6103162A	Based on	WO 9725462	N/A
EP 876522B1	N/A	1996EP-0945731	November 13, 1996
EP 876522B1	N/A	1996WO-DE02190	November 13, 1996
EP 876522B1	Based on	WO 9725462	N/A
DE 59606647G	N/A	1996DE-0506647	November 13, 1996
DE 59606647G	N/A	1996EP-0945731	November 13, 1996
DE 59606647G	N/A	1996WO-DE02190	November 13, 1996
DE 59606647G	Based on	EP 876522	N/A
DE 59606647G	Based on	WO 9725462	N/A

INT-CL (IPC): D01D010/06, D01F002/00, D01F002/02, D01F011/02

ABSTRACTED-PUB-NO: DE 19600572A

BASIC-ABSTRACT:

Production of flexible <u>cellulose</u> fibres involves spinning <u>cellulose</u> solutions through spinnerets through an air gap into an aqueous and/or alcoholic <u>coagulation</u> bath containing amine oxide and then drying. The novelty is that, before drying, the moist spun fibre is passed through after-treatment bath(s) containing <u>water and water-miscible alcohol(s)</u>, diol(s) and/or triol(s) and washing bath(s) containing <u>water</u>, an alkanol, a diol or a triol.

Also claimed are $\underline{\text{cellulose}}$ fibres made by this method, which have an initial modulus < 1500 cN/tex.

Preferably the after-treatment bath is <u>alkaline</u> and especially consists of a mixture of alkanol and aqueous sodium hydroxide (NaOH) solution, more especially <u>ethanol</u> (EtOH) and 1-30% aqueous NaOH solution. The washing bath contains EtOH.

ADVANTAGE - The orientation, modulus, brittleness and tendency of the fibres to fibrillate are all reduced compared with the usual fibres spun from solutions in amine oxides, especially N-methylmorpholine N-oxide (<u>NMMNO</u>), or aqueous <u>NMMNO</u>.

ABSTRACTED-PUB-NO: EP 876522B

EQUIVALENT-ABSTRACTS:

Production of flexible <u>cellulose</u> fibres involves spinning <u>cellulose</u> solutions through spinnerets through an air gap into an aqueous and/or alcoholic <u>coagulation</u> bath containing amine oxide and then drying. The novelty is that, before drying, the moist spun fibre is passed through after-treatment bath(s) containing <u>water and water</u>-miscible <u>alcohol(s)</u>, diol(s) and/or triol(s) and washing bath(s) containing <u>water</u>, an alkanol, a diol or a triol.

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US 6103162A

Production of flexible <u>cellulose</u> fibres involves spinning <u>cellulose</u> solutions through spinnerets through an air gap into an aqueous and/or alcoholic <u>coagulation</u> bath containing amine oxide and then drying. The novelty is that, before drying, the moist spun fibre is passed through after-treatment bath(s) containing <u>water and water-miscible alcohol(s)</u>, diol(s) and/or triol(s) and washing bath(s) containing <u>water</u>, an alkanol, a diol or a triol.

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ADVANTAGE - The orientation, modulus, brittleness and tendency of the fibres to fibrillate are all reduced compared with the usual fibres spun from solutions in amine oxides, especially N-methylmorpholine N-oxide (<u>NMMNO</u>), or aqueous <u>NMMNO</u>.

CHOSEN-

Dwg.0/0

DRAWING:

TITLE-TERMS: FLEXIBLE CELLULOSE FIBRE PRODUCE REDUCE ORIENT PASS WET FIBRE

THROUGH BATH CONTAIN WATER WATER MISCIBLE ALKANOL DI OL TRI

OL WASHING BATH CONTAIN ONE

DERWENT-CLASS: A11 F01

CPI-CODES: A03-A05A; A11-B15C; A12-S05L; F01-C08C; F01-D06;

ENHANCED-POLYMER-INDEXING: Polymer Index [1.1] 018 ; R01852*R G3634 D01 D03 D11 D10 D23 D22 D31 D42 D50 D76 D86 F24 F29 F26 F34 H0293 P0599 G3623 ; S9999 S1627

S1605; S9999 S1070*R; S9999 S1616 S1605

Polymer Index [1.2] 018; ND07; B9999 B4035 B3930 B3838 B3747; N9999 N6995 N6962; N9999 N6860 N6655; N9999 N6882 N6655; N9999 N6780*R N6655; B9999 B3714 B3690; B9999 B4080 B3930 B3838 B3747; B9999 B5265 B4740; B9999 B4193 B4091 B3838 B3747; B9999 B3907

B3838 B3747

Polymer Index [1.3] 018; D01 D11 D10 D23 D22 D31 D76 D41 D42 D50 D85 F20 F34 N* 5A O* 6A; R01740 G2335 D00 F20 H* O* 6A; A999 A475; A999 A771

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1997-113951